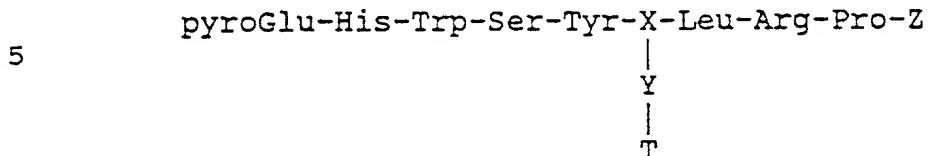


Thus having disclosed this invention, what is claimed is:

1. A method for sterilizing a mammal, said method comprising administering an effective amount of a conjugate compound comprised of a peptide hormone selected from the group consisting of a GnRH analog (GnRH-A), a human chorionic gonadotropin, an equine chorionic gonadotropin, a luteinizing hormone or a follicle - stimulating hormone which is conjugated to a toxin selected from the group consisting of those plant toxins or bacterial toxins having a toxic domain and a translocation domain and wherein said conjugate compound is capable of binding with a receptor cell of the mammal's pituitary gland and direct chemical attack upon cells of said pituitary gland.

2. A method for sterilizing a mammal, said method comprising administering an effective amount of a conjugate compound comprised of a peptide hormone selected from the group consisting of a GnRH analog (GnRH-A), a human chorionic gonadotropin, an equine chorionic gonadotropin, a luteinizing hormone and a follicle - stimulating hormone which is conjugated to a toxin selected from the group consisting of those plant toxins: ricin, modeccin, abrin, pokeweed anti-viral protein, α -amanitin, gelonin ribosome inhibiting protein ("RIP") barley RIP, wheat RIP, corn RIP, rye RIP and flax RIP; those bacterial toxins: diphtheria toxin, pseudomonas exotoxin and shiga toxins having a toxic domain and a translocation domain or those chemical toxins: melphalan, methotrexate, nitrogen mustard, doxorubicin and daunomycin which are capable of direct chemical attack upon cells of said pituitary gland when conjugated to said peptide hormone.

3. A method for sterilizing a mammal, said method comprising administering an effective amount of a conjugate compound having the general formula:



wherein X is an amino acid selected from the group consisting of lysine, D-lysine, ornithine, D-ornithine, glutamic acid, D-glutamic acid, aspartic acid, D-aspartic acid, cysteine, D-cysteine, tyrosine and D-tyrosine; Y is a linking agent selected from the group consisting of: 2-iminothiolane, N-succinimidyl-3-(2-pyridyldithio) propionate (SPDP), - 4-succinimidylloxycarbonyl- α -(2-pyridyldithio)-toluene (SMPT), m-maleimidobenzoyl-N-hydroxysuccinimide ester (MBS), N-succinimidyl(4-iodoacetyl)aminobenzoate (SIAB), succinimidyl 4-(p-maleimidophenyl)butyrate (SMPB), 1-ethyl-3-(3-dimethylaminopropyl)carbodimide (EDC), bis-diazobenzidine or glutaraldehyde; Z is a substituent selected from the group consisting of Gly-NH₂, ethylamide, and AzA-Gly-NH₂ and T is a toxin selected from the group consisting of those plant toxins: ricin, modeccin, abrin, pokeweed anti-viral protein, α -amanitin, gelonin ribosome inhibiting protein ("RIP") barley RIP, wheat RIP, corn RIP, rye RIP and flax RIP; those bacterial toxins: diphtheria toxin, pseudomonas exotoxin and shiga toxin having a toxic domain and a translocation domain or those chemical toxins: melphalan, methotrexate, nitrogen mustard, doxorubicin and daunomycin and wherein said conjugate compound is capable of binding with a receptor cell of the mammal's pituitary gland and

direct attack upon cells of said pituitary gland.

4. A method for sterilizing a mammal, said method comprising administering an effective amount of a conjugate compound having the formula:

5 pyroGlu-His-Trp-Ser-Tyr-D-Lys-Leu-Arg-Pro-ethylamide

10

15

20

25

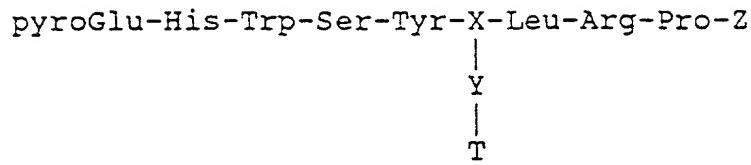
wherein Y is a linking agent selected from the group consisting of: 2-iminothiolane, N-succinimidyl-3-(2-pyridyldithio) propionate (SPDP), 4-succinimidoyloxycarbonyl- α -(2-pyridyldithio)-toluene (SMPT), γ -m-maleimidobenzoyl-N-hydroxysuccinimide ester (MBS), N-succinimidyl(4-iodoacetyl)aminobenzoate (SIAB), succinimidyl 4-(p-maleimidophenyl)butyrate (SMPB), 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide (EDC), bis-diazobenzidine or glutaraldehyde and T is a bacteria toxin selected from the group consisting of those diphtheria toxins, pseudomonas exotoxins and shiga toxins having a toxic domain and a translocation domain and wherein said conjugate compound is capable of binding with a receptor cell of the mammal's pituitary gland and direct attack upon cells of said pituitary gland.

5. A method for treating a sex hormone related disease in a mammal, said method comprising administering an effective amount of a conjugate compound comprised of a peptide hormone selected from the group consisting of a GnRH analog (GnRH-A), a human chorionic gonadotropin, an equine chorionic

gonadotropin, a luteinizing hormone or a follicle - stimulating hormone which is conjugated to a toxin selected from the group consisting of those plant toxins or bacterial toxins having a toxic domain and a translocation domain and wherein said conjugate compound is capable of binding with a receptor cell of the mammal's pituitary gland and direct chemical attack upon cells of said pituitary gland.

6. A method for sterilizing a mammal, said method comprising administering an effective amount of a conjugate compound comprised of a peptide hormone selected from the group consisting of a GnRH analog (GnRH-A), a human chorionic gonadotropin, an equine chorionic gonadotropin, a luteinizing hormone and a follicle - stimulating hormone which is conjugated to a toxin selected from the group consisting of those plant toxins: ricin, modeccin, abrin, pokeweed anti-viral protein, α -amanitin, gelonin ribosome inhibiting protein ("RIP") barley RIP, wheat RIP, corn RIP, rye RIP and flax RIP; those bacterial toxins: diphtheria toxin, pseudomonas exotoxin and shiga toxins having a toxic domain and a translocation domain or those chemical toxins: melphalan, methotrexate, nitrogen mustard, doxorubicin and daunomycin which are capable of direct chemical attack upon cells of said pituitary gland when conjugated to said peptide hormone.

7. A method for treating a sex hormone related disease in a mammal, said method comprising administering an effective amount of a conjugate compound having the general formula:



wherein X is an amino acid selected from the group consisting of lysine, D-lysine, ornithine, D-ornithine, glutamic acid, D-glutamic acid, aspartic acid, D-aspartic acid, cysteine, D-cysteine, tyrosine and D-tyrosine; Y is a linking agent selected from the group consisting of: 2-iminothiolane, N-succinimidyl-3-(2-pyridyldithio) propionate (SPDP), 4-succinimidylloxycarbonyl- α -(2-pyridyldithio)-toluene (SMPT), m-maleimidobenzoyl-N-hydroxysuccinimide ester (MBS), N-succinimidyl(4-iodoacetyl)aminobenzoate (SIAB), succinimidyl 4-(p-maleimidophenyl)butyrate (SMPB), 1-ethyl-3-(3-dimethylaminopropyl)carbodimide (EDC), bis-diazobenzidine or glutaraldehyde; Z is a substituent selected from the group consisting of Gly-NH₂, ethylamide, and Aza-Gly-NH₂ and T is a toxin selected from the group consisting of those plant toxins: ricin, modeccin, abrin, pokeweed anti-viral protein, α -amanitin, gelonin ribosome inhibiting protein ("RIP") barley RIP, wheat RIP, corn RIP, rye RIP and flax RIP; those bacterial toxins: diphtheria toxin, pseudomonas exotoxin and shiga toxin having a toxic domain and a translocation domain or those chemical toxins: melphalan, methotrexate, nitrogen mustard, doxorubicin and daunomycin and wherein said conjugate compound is capable of binding with a receptor cell of the mammal's pituitary gland and direct attack upon cells of said pituitary gland.

8. A method for treating a sex hormone related disease in a mammal, said method comprising

administering an effective amount of a conjugate compound having the formula:

pyroGlu-His-Trp-Ser-Tyr-D-Lys-Leu-Arg-Pro-ethylamide

5

|

Y

|

T

10 wherein Y is a linking agent selected from the group consisting of: 2-iminothiolane, N-succinimidyl-3-(2-pyridyldithio) propionate (SPDP), 4-succinimidoxycarbonyl- α -(2-pyridyldithio)-toluene (SMPT), m-maleimidobenzoyl-N-hydroxysuccinimide ester (MBS), N-
15 succinimidyl(4-iodoacetyl)aminobenzoate (SIAB), succinimidyl 4-(p-maleimidophenyl)butyrate (SMPB), 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide (EDC), bis-diazobenzidine or glutaraldehyde and T is a bacteria toxin selected from the group consisting of those
20 diphtheria toxins, pseudomonas exotoxins and shiga toxins having a toxic domain and a translocation domain and wherein said conjugate compound is capable of binding with a receptor cell of the mammal's pituitary gland and direct attack upon cells of said
25 pituitary gland.